Attorney Docket No. B45310

International Application No. PCT/EP03/06095

International Filing Date: June 6, 2003

In the Claims:

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1. (Original) An immunogenic composition comprising a xenogeneic P501S polypeptide or a xenogeneic P501S-encoding polynucleotide, or an immunogenic fragment thereof; and a pharmaceutically acceptable carrier.

- (Currently Amended) An immunogenic composition as claimed in claim 1 wherein the xenogeneic P501S polypeptide or immunogenic fragment thereof <u>comprises</u> is selected from the group comprising SEQ ID NO:1 or SEQ ID NO:3 or SEQ ID NO:10.
- (Currently Amended) An immunogenic composition as claimed in claim 1 wherein the xenogeneic P501S-encoding polynucleotide or immunogenic fragment comprises is selected from the group comprising SEQ ID NO:2 or SEQ ID NO:4 or SEQ ID NO:11.
- 4. (Currently Amended) An immunogenic composition as claimed in <u>claim 1</u> any of elaims 1 to 3 which additionally comprises a TH-1 inducing adjuvant.
- 5. (Currently Amended) An immunogenic composition as claimed in claim 4 in which the TH-1 inducing adjuvant <u>comprises</u> is selected from the group of adjuvants comprising: 3D-MPL, QS21, an immunostimulatory CpG oligonucleotide, a mixture of QS21 and or cholesterol or a combination of one or more of any of these adjuvants.
- 6. (Original) An immunogenic composition comprising an effective amount of antigen presenting cells, modified by in vitro loading with a xenogeneic P501S polypeptide or immunogenic fragment thereof, or genetically modified in vitro to express a xenogeneic P501S polypeptide and a pharmaceutically effective carrier.
- 7. (Currently Amended) A pharmaceutical composition comprising the An immunogenic composition as claimed in claim 1 any of claims 1 to 6 for use in medicine.
- 8. (Currently Amended) A process for the production of an immunogenic composition as claimed in claim 1 any of claims 1 to 7, comprising admixing a xenogeneic P501S

Attorney Docket No. B45310

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polypeptide or a xenogeneic P501S-encoding polynucleotide with a suitable adjuvant, diluent or other pharmaceutically acceptable carrier.

- 9. (Currently Amended) An isolated polypeptide comprising an amino acid sequence which has at least 92% identity to the amino acid sequence of SEQ ID NO:1 over the entire length of of-SEQ ID NO:1.
- 10. (Original) An isolated polypeptide as claimed in claim 9 in which the amino acid sequence has at least 95% identity to SEQ ID NO:1.
- 11. (Original) The polypeptide as claimed in claim 10 comprising the amino acid sequence of SEQ ID NO:1.
- 12. (Original) The isolated polypeptide of SEQ ID NO:1.
- 13. (Currently Amended) A polypeptide comprising an immunogenic fragment of a polypeptide as claimed in <u>claim 9 any one of claims 9 to 12</u> in which the immunogenic activity of the immunogenic fragment is substantially the same as the polypeptide of SEQ ID NO:1.
- 14. (Currently Amended) A polypeptide as claimed in <u>claim 9</u> any of claims 9 to 13 wherein said polypeptide is part of a larger fusion protein.
- 15. (Currently Amended) An isolated polynucleotide encoding a polypeptide as claimed in claim 9 any of claims 9 to 14.
- 16. (Original) The isolated polynucleotide of claim 15, comprising the sequence of SEQ ID NO:2.
- 17. (Original) An isolated polynucleotide comprising a nucleotide sequence encoding a polypeptide that has at least 92% identity to the amino acid sequence of SEQ ID NO:2, over the entire length of SEQ ID NO:2; or a nucleotide sequence complementary to said isolated polynucleotide.
- 18. (Currently Amended) The isolated polynucleotide of claim 15 as defined in any one of claims 15 to 17 in which the identity of said polynucleotide to SEQ ID NO:1 is at least 95%.

Attorney Docket No. B45310
International Application No. PCT/EP03/06095

International Filing Date: June 6, 2003

19. (Currently Amended) An expression vector or a recombinant live microorganism comprising an isolated polynucleotide according to <u>claim 15</u> any one of claims 15—18.

- 20. (Currently Amended) A host cell comprising the expression vector of claim 19 or the isolated polynucleotide of claims 15 to 18.
- 21. (Currently Amended) A process for producing a polypeptide of <u>claim 9</u> elaims 9 to 14 comprising culturing a host cell <u>comprising a polynucleotide comprising a nucleotide sequence encoding a polypeptide that has at least 92% identity to the amino acid sequence of SEQ ID NO:2, over the entire length of SEQ ID NO:2; or a nucleotide sequence complementary to said isolated polynucleotide of claim 20 under conditions sufficient for the production of said polypeptide and recovering the polypeptide from the culture medium.</u>
- 22. (Currently Amended) The use of a polypeptide or a polynucleotide as claimed in any of claims 9 to 18 in the manufacture of an An immunogenic composition for immunotherapeutically treating a patient suffering from or susceptible to prostate cancer or other P501S-associated tumours or diseases comprising a polypeptide of claim 9.
- 23. (Original) A method of inducing an immune response against human P501S having an amino acid sequence as set forth in SEQ ID NO:5 to SEQ ID NO:7 in a human, comprising administering to the subject an effective dosage of an immunogenic composition comprising a xenogeneic form of said human P501S.
- 24. (Curently Amended) The method of claim 23, wherein said immunogenic composition comprises a xenogenic P501S polypeptide or a fragment thereof. is according to any of claims 1 to 5.
- 25. (Currently Amended) The method of claim 23, wherein said xenogeneic form of human P501S is the rat P501S as elaimed in any of claims 9 to 14., which has at least 92% identity to the amino acid sequence of SEQ ID NO:1 over the entire length of SEQ ID NO:1
- 26. (Original) The method of claim 23, wherein said xenogeneic form of human P501S is selected from the group consisting of the mouse P501S having the sequence as set

Attorney Docket No. B45310

International Application No. PCT/EP03/06095

International Filing Date: June 6, 2003

forth in SEQ ID NO:10 and the Cynomolgus monkey P501S having the sequence set forth in SEQ ID NO:3.

- 27. (Currently Amended) The method of <u>claim 23any of claims 23 to 26</u>, wherein said immunogenic composition includes a live viral expression system or a plasmid vector which expresses said xenogeneic antigen, of through antigen loaded dendritic cells.
- 28. (New) The method of claim 23, wherein said immunogenic composition comprises a xenogenic P501S-encoding polynucleotide or a fragment thereof.